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EXAMINER	
WOO, KUO-KONG	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,190	MURTAGH ET AL.	
	Examiner	Art Unit	
	KUO WOO	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 1, 2010 has been entered.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on February 1, 2010 has been considered.

Response to Amendment

3. This action is response to the Amendment filed on February 1, 2010.

4. Claims 1,8,20 and 25 have been amended. Claims 1-21, 25-27 are currently pending.

Claim Objections

5. Claims 5, 6, 9, 11-19, 19, 21, 26 and 27 are objected to because of the following informalities: Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the flowing status

identifiers :(Original), (Currently amended), (Canceled), (Previous presented).... Since all above 15 claims have no indication any change from previous claims, therefore shall be identified as "Previous Presented" and not "Currently Amended". Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-21 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al. (US PAT 7,395,077 B2) herein after referred to as Wilson077 in view of Wilson (US PG PUB 2006/0148495 A1) herein after referred to as Wilson495.

Regarding claims 1 and 25, Wilson077 discloses" starting a delivery attempt of the SMS message from a first subscriber to a second subscriber via said SMSC" (Col.4. Lines 7, which recites Mobile Terminated (MT) where the sender subscribes to network A and the recipient to network B, and so the MO text message first passes through the SMSC of network A, where it is converted to MT format);

"Intercepting transparently to the SMSC said SMS message delivery attempt from the first subscriber in the network before delivery of said SMS message (Col. 2. Lines 57, which recite SMS message that to intercept routing queries sent to the HLR of said network from another network, for receiving a text message from such another

network), by intercepting an inbound HLR query associated with said message delivery attempt, by examining said intercepted HLR query for possible invocation of a smart service to said SMS message, including the steps of: routing the HLR query onward to a HLR generating a response to the HLR query (Col.. 6 Lines 7, which recites The message passes first via the service centre [12] of network A, where a routing query is made to the HLR [4] of network B), in the HLR, the HLR query response including a mobile network location address (Col. 6. Lines 12, which recite the address of subscriber B that then the router responds to the routing query, giving the address of the SMS Router [3] in network B.) of said second subscriber;

"Replacing, in a smart services control node, (Col. 4. Lines 39, which recites a routing query called "Send Routing Information for Short Message (SRI-SM)" will be sent from the originating network's SMSC to the HLR in network B. **Network B's signaling architecture (** act as SSCN**)** can be configured to direct these SRI-SM messages via an SMS Router in Network B), the mobile network location address of said second subscriber in an HLR query response with the network location address of the smart services control node" (Col. 4. Lines 43, which recites redirection the network location address that The SMS Router may then respond on behalf of the HLR, but instead of directing the MT text message to the destination mobile as the HLR would have done, it may direct the MT text message to be routed to an SMS Router in Network B, which SMS Router is configured to implement the invention. This redirection may be made conditional on the recipient having subscribed to a relevant

value-added service, or may be unconditional) wherein redirection is obvious to those skill in the art as replacing one address to another;

"Routing said intercepted SMS message delivery (Col. 4. Lines 39, which recites a routing query called "Send Routing Information for Short Message (SRI-SM)" will be sent from the originating network's SMSC to the HLR in network B. **Network B's signaling architecture (act** as SSCN**)**) attempt via a smart services control node in the network";

"Invoking said smart services (Col. 4. Lines 48, which recites the condition to invoke the service that redirection may be made conditional on the recipient having subscribed to a **relevant value-added service**, or may be unconditional) for said SMS message destined to said subscriber in response to said examination".

However, Wilson077 does not explicitly disclose signaling architecture act as smart service control node.

In an analogous art, Wilson495 discloses (¶185 Using the SMS Wizard technique, as described in EP-A-1 184 119, for selecting and routing certain messages to an intelligent text processing engine permits value added service enhancements. For example the SMS Wizard 22 can be used to interpret message content, perform transformations or signaling changes, and to forward the message to its destination in the normal way. This capability allows embedded commands to be placed in the message body text, typically at the start, which cause the message to be modified in a defined way) wherein function as smart service control node to communicated between subscribers in different network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Wilson et al. teaching method of controlling delivery of SMS to various subscribers regardless network configuration in combination of Wilson provides detail description of SMS Wizard and SMS router (act as SSCN), the message transformation means (22) and SMS router (16) may return the response message without requiring a routing query to an HLR (28), the response message addressing and routing information being instead derived from the original message. (See Abstract). Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include: Simple Substitution of one known element for another to obtain predictable results.

Regarding claim 2, Wilson077 discloses "delivering a SMS message from said first subscriber in said first mobile operator network to said subscriber of said second mobile operator network" (Col 6, lines 3-5, With reference to FIG. 2, a message sender [1] is connected to a telecommunications network A and wishes to send a text message to a recipient [2] who subscribes to network B);

"Intercepting a SMS message inbound delivery attempt in said second mobile operator network before delivery of said SMS message" Wilson discloses (Col. 6, lines 8-9, This query is caused by network B to pass through an SMS router);

"Replacing a mobile location address of said second subscriber (Col. 4, Lines 43, the SMS Router may then respond on behalf of the HLR, but instead of directing the MT text message to the destination mobile as the HLR would have done, it may direct the MT text message to be routed to an SMS Router in Network B, which SMS Router is

configured to implement the invention. This redirection (replacing **a mobile network location address**) may be made conditional on the recipient (**second subscriber**) having subscribed to a relevant value-added service, or may be unconditional, wherein Wilson invention teaches newly amended limitations in claims 1, 20 and 25. In an HLR query response with the network location address of a smart services control node";

"Routing said intercepted SMS message delivery attempt via a smart services control node in second operator mobile network"; Wilson discloses (Col 6, lines 9-12,If the router detects that the message is for a recipient who has configured special delivery settings, e.g. delivery by email to an email account [9] or by fax to a fax machine [10]);

"Examining said message delivery attempt for possible invocation of a smart service to said SMS message; Wilson discloses (Col. 6, lines 12-13, then the router responds to the routing query, giving the address of the SMS Router [3] in network B);

"Invoking said smart services for said SMS message destined to said subscriber of said second mobile operator network in response to said examination" Wilson discloses (Col 6, lines 14-17, he message then passes from the SMSC [12] to the SMS Router [3]. As before, the recipient may configure delivery options in the SMS router [3] by means of commands (e.g. using USSD) sent to the router via the HLR [4].),wherein subscriber B will performs same as subscriber A as illustrated herein.

Regarding claim 3, Wilson discloses "wherein the step of intercepting includes intercepting an inbound HLR query (Col.3 Lines 8 , which recites interception can be perform at inbound or outbound HLR that The interception could be performed either by

the subscriber sending the command messages to a predefined destination number, or by another means. The intercepted commands are then used to configure the desired delivery options) associated with said message delivery attempt".

Regarding claims 4 and 7, Wilson077 discloses "wherein the step of intercepting includes intercepting an inbound HLR query associated with said message delivery attempt and examining said intercepted HLR query such that said HLR query provides an indication that a smart service needs to be applied (Col.4.Lines 21, which recite value added service is needed (require smart service in HLR query) that In the first (MO) case, it is straightforward to ensure that all MO messages pass through an SMS router, and many networks are implementing architectures that do this for a variety of applications including network overload protection separation ("grooming") of high volume traffic value added services) and ((Col 2, lines 55-64, HLR (home location register) and a signal processing means, said signal processing means being configured in association with the HLR to intercept routing queries sent to the HLR of said network from another network, for receiving a text message from such another network, to communicate with the HLR but to provide a modified address which will cause the text message from said another network to be sent to the message processing means which will then effect delivery in accordance with at least one previously selected mode of delivery) to said SMS message and route the SMS message to the smart services control node".

Regarding claims 5 and 6, Wilson077 discloses "wherein said indication from the HLR Query is associated with one or more of the following: a SMS service, a specific

subscriber directory number (MSISDN), a directory number ,wherein said indication from the HLR Query is associated with one or more of the following: a SMS service, a specific subscriber directory number (MSISDN), a directory number (¶128, which recites the directory that network A, a PRN (provide roaming number) request will be sent from the HLR to the SMS router 16 in network A. Network A's virtual mobile equipment 19 is operable to allow it to respond to such requests with the MSISDN or directory number of the suitable voice equipment such as the VSE 25, which is preferably in network A) and (to route a call directly to a destination telephone number associated with the virtual mobile number dialed by the caller according to, for example, time of day or other criterion configured on the system) in the HLR Query matches a specific number prefix, a specific SMSC identified by its PLMN network address, a foreign SMSC network address".

Regarding claim 8, Wilson495 discloses "the step of routing said SMS message from said smart message services control node to said real location address wherein said SMS message is routed to said real network location address from an address stored (¶88, which recites after any processing, the SMS router 16 may query the HLR 28 to obtain delivery routing and then the messages may be onward delivered either directly via the VMSC 18 of the destination mobile terminal 20, or **indirectly via a store and forward mechanism such as the SMSC 13**. Alternatively the router 16 may **interact with the SMS Wizard** 22 or the email gateway 24 instead or as well as delivering the message. Traffic destined for service providers 30 may be groomed via

the SMS interface gateway 17 or via the SMSC 13) in said smart services control node previously obtained from said intercepted HLR query response".

Regarding claim 9, Wilson495 discloses "the step of terminating said SMS message delivery attempt in the said smart services control node when the said smart service requires that the said SMS message is not delivered (¶192, which recites invoke smart service by provide a solution to the limitation of message storage only being in the sender's network, preventing intelligent delivery services from being invoked when the recipient is unavailable) to the said subscriber of the said second operator network".

Regarding claim 10, Wilson495 discloses "the step of terminating said SMS message delivery attempt when said condition of said intercepted delivery attempt indicates in said second operator network (¶168, which recited condition is not match which mean second operator can not accept the message that The address of the sender or other correlation means is included in the response to the SMS router 16. In the event of no match, a suitable error message may be sent to the user) and (¶169, which recites the response to originator then formulated into a Mobile Terminated message by the SMS router 16 and transmitted to the user. This retains the advantage of a single transit of the network by each message transaction) that said SMS message originates from a barred originating entity belonging to another network".

Regarding claim 11, Wilson495 discloses "the step of triggering the execution of smart service logic associated with said smart services SMS control node (¶66, which recites the condition to trigger the execution that supports operation in conjunction with

a message transformation means that may be known as an SMS Wizard (see EP-A-1 185 119), which can parse, interpret and transform message content and addressing in order to generate a response message according to programmable tables of exceptions, which response may be routed either via the SMS router or via an alternative route such as over a data network) in response to condition based on the content of said SMS message".

Regarding claim 12, Wilson495 discloses "the step of triggering the execution of smart service logic associated with said smart services SMS control node in response to condition based the content of said SMS message and wherein said trigger condition is a meta tag signal (¶137, which recites the Meta tag such as email or web address that will trigger the action that if the web mail user has a suitably capable terminal, it is possible for the call to be routed over a data network to the terminal so that direct voice communication can be established. Also text replies sent to the web mail user could be arranged to `pop up` on the recipient's terminal) or attribute associated with said SMS message".

Regarding claim 13, Wilson495 discloses "the step of generating a unique identifier (¶161, which recites these identities might need to be unique across the whole network, or unique within a closed user-group or community. Messages could then be sent to other users by using their alphanumeric address instead of a destination telephone number) for said SMS message at said smart services SMS control node".

Regarding claim 14, Wilson495 discloses "the step of generating a unique identifier for said SMS message at said smart services SMS control node, wherein said

unique identifier is generated from one or more of the following SMS message parameters: Originating Address, Destination Address (¶19, which recites message include the handset transposes the source address and destination address, and delivers the reply message to the virtual mobile number), message fragment number, SMSC address or SMS Centre timestamp" (¶128, which recites the timestamp in the message that time of day or other criterion configured on the system).

Regarding claim 15, Wilson495 discloses "the step of generating a unique identifier (¶161, which recites these identities might need to be unique across the whole network, or unique within a closed user-group or community) for said SMS message at said smart services SMS control node";

"Storing said unique identifier in a storage memory (¶253, which recites ID stored in smart service that is loaded by SMS Wizard when it starts up and is retained in memory throughout the session) of said smart services control node".

Regarding claim 16, Wilson495 discloses "the step of comparing the generated unique identifier with unique identifiers for each SMS message delivery attempt processed by said smart services SMS node for detecting a subsequent attempt (¶88, which recites after first attempt (voice) then send subsequence delivery as email that permits traffic destined for applications or service providers to be originated from any network Voice calls to virtual mobile numbers may be directed by the HLR function within the virtual mobile equipment 19 to be delivered to the voice services equipment 25, which for example may transcode a voice message and deliver it via the email gateway 24) of an SMS message from a remote SMSC after the first delivery attempt".

Regarding claims 17 and 18 , Wilson495 discloses “the step of comparing the generated unique identifier with unique identifiers for each SMS message delivery attempt processed by said smart services SMS node for detecting a subsequent attempt of an SMS message from a remote SMSC after the first delivery attempt, wherein only unique identifiers are stored in said storage memory for retry SMS delivery attempts for comparison (¶63, which recites the store message that comparing, for each message, an attribute of that message with the stored message attributes, and thereby selecting the respective messaging application on the basis of the comparison0 and wherein said retry SMS delivery attempt is routed onwards by the smart services control node to the real network location address of the said subscriber after said comparison.

Regarding claim 19, Wilson495 discloses “the steps of generating a database of unique identifiers in said storage memory and deleting said stored unique identifiers after a preset period of time” (¶160, which recites database information was stored and updated In a preferred embodiment a provisioning system is provided to enable the operator to **update and maintain the database**, and to access its translation facilities.) wherein it will be obvious to those skill in the art database updated is performed after a present period of time.

Regarding claims 20 and 26, Wilson077 discloses “delivering a SMS message from said first subscriber in said first mobile operator network to said subscriber of said second mobile operator network” (Col. 2, Lines 59, which recites communicated

between different network that HLR but to provide a modified address which will cause the text message from said another network) ;

"Intercepting a SMS message inbound delivery attempt in said second mobile operator network before delivery of said SMS message" (Col. 2. Lines 57 which recite the HLR to intercept routing queries sent to the HLR of said network from another network, for receiving a text message from such another network, to communicate with the HLR but to provide a modified address which will cause the text message from said another network to be sent to the message processing means which will then effect delivery in accordance with at least one previously selected mode of delivery.);

"Replacing, (Col. 4. Lines 48 which recites the replace address as redirecting address and the redirection may be made conditional on the recipient having subscribed to a relevant value-added service, or may be unconditional) in a smart services control node, a mobile network location address of said second subscriber in an HLR query response with the network location address of the smart services control node";

"Routing said intercepted SMS message delivery attempt via a smart services control node in second operator mobile network" (Col.4 lines 43, which recites The SMS Router may then respond on behalf of the HLR, but instead of directing the MT text message to the destination mobile as the HLR would have done, it may direct the MT text message to be routed to an SMS Router in Network B);

Wilson495 discloses "Examining said message delivery attempt (¶185, which recites the (smart service control) wizard router can be used to resolve delivery that the SMS Wizard 22 to interpret message content, perform transformations or signaling

changes, and to forward the message to its destination in the normal way) for possible invocation of a smart service to said SMS message";

"Invoking said smart services for said SMS message destined to said subscriber of said second mobile operator network (¶88, which recites the smart service will be used for that Alternatively the router 16 may interact with the SMS Wizard 22 or the email gateway 24 instead or as well as delivering the message) in response to said examination".

Regarding claims 21 and 27, Wilson495 discloses "a computer program (¶255, the Wizard Engine program is the main component of SMS Wizard. On a development PC it can receive input messages via from an SMS Simulator. On a live system the messages are received from an SMS router as shown in FIG. 5) on a computer readable storage medium comprising program instruction for causing a computer to perform"

Remarks

8. Applicant argues claims 20 and 25 were not anticipated by the Wilson patent. In fact, Wilson 077 and Wilson 495 do cover when subscribers within same network or with different networks. Claims 1 and 25 both cover with same network and claims 20 and 20 cover communicating within different network which both were cover by Wilson 077 and Wilson 495.

9. Applicant argues Wilson do not anticipate replacement in claim, New reference Wilson 077 and Wilson 495 using redirecting address as address replacement and would have been obvious to the skill in the art to understand that replacing address is

same as redirecting address. In conclusion, With Wilson077 and Wilson 495, have disclosed every limitations of Previously Presented and Currently Amended claims

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/Lewis G. West/

Supervisory Patent Examiner, Art Unit 2617